



01PE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/956,940

DATE: 03/19/2002
TIME: 14:59:50

Input Set : N:\Crf3\RULE60\09956940.raw
Output Set: N:\CRF3\03192002\I956940.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: HAYNES, BARTON F.
7 (ii) TITLE OF INVENTION: USE OF SYNTHETIC PEPTIDES TO INDUCE
8 TOLERANCE TO PATHOGENIC T AND B CELL EPITOPES OF
9 AUTOANTIGENS OR INFECTIOUS AGENTS

11 (iii) NUMBER OF SEQUENCES: 53

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: NIXON & VANDERHYE P.C.
15 (B) STREET: 1100 NORTH GLEBE ROAD
16 (C) CITY: ARLINGTON
17 (D) STATE: VIRGINIA
18 (E) COUNTRY: U.S.A.
19 (F) ZIP: 22201-4714

ENTERED

21 (v) COMPUTER READABLE FORM:

22 (A) MEDIUM TYPE: Floppy disk
23 (B) COMPUTER: IBM PC compatible
24 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
25 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25

27 (vi) CURRENT APPLICATION DATA:

C--> 28 (A) APPLICATION NUMBER: US/09/956,940
C--> 29 (B) FILING DATE: 12-Oct-2001
30 (C) CLASSIFICATION:

44 (vii) PRIOR APPLICATION DATA:

33 (A) APPLICATION NUMBER: US/08/460,673
34 (B) FILING DATE:
35 (A) APPLICATION NUMBER: US 08/015,987
36 (B) FILING DATE: 10-FEB-1993
37 (A) APPLICATION NUMBER: US 07/833,429
38 (B) FILING DATE: 10-FEB-1992
41 (A) APPLICATION NUMBER: US 07/591,109
42 (B) FILING DATE: 01-OCT-1990
45 (A) APPLICATION NUMBER: US 07/093,854
46 (B) FILING DATE: 08-SEP-1987

48 (viii) ATTORNEY/AGENT INFORMATION:

49 (A) NAME: WILSON, MARY J.
50 (B) REGISTRATION NUMBER: 32,955
51 (C) REFERENCE/DOCKET NUMBER: 1579-5

53 (ix) TELECOMMUNICATION INFORMATION:

54 (A) TELEPHONE: (703) 816-4000
55 (B) TELEFAX: (703) 816-4100
56 (C) TELEX: 200797 NIXN UR

59 (2) INFORMATION FOR SEQ ID NO: 1:

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```
61      (i) SEQUENCE CHARACTERISTICS:
62          (A) LENGTH: 10 amino acids
63          (B) TYPE: amino acid
64          (C) STRANDEDNESS: single
65          (D) TOPOLOGY: linear
67      (ii) MOLECULE TYPE: protein
71      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
73      Trp Asn Pro Ala Asp Tyr Gly Gly Ile Lys
74      1          5          10
76 (2) INFORMATION FOR SEQ ID NO: 2:
78      (i) SEQUENCE CHARACTERISTICS:
79          (A) LENGTH: 10 amino acids
80          (B) TYPE: amino acid
81          (C) STRANDEDNESS: single
82          (D) TOPOLOGY: linear
84      (ii) MOLECULE TYPE: protein
88      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
90      Trp Asn Pro Asp Asp Tyr Gly Gly Val Lys
91      1          5          10
93 (2) INFORMATION FOR SEQ ID NO: 3:
95      (i) SEQUENCE CHARACTERISTICS:
96          (A) LENGTH: 22 amino acids
97          (B) TYPE: amino acid
98          (C) STRANDEDNESS: single
99          (D) TOPOLOGY: linear
101     (ii) MOLECULE TYPE: protein
105     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
107     Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Trp Asn Pro Ala
108     1          5          10          15
110     Asp Tyr Gly Gly Ile Lys
111     20
113 (2) INFORMATION FOR SEQ ID NO: 4:
115     (i) SEQUENCE CHARACTERISTICS:
116         (A) LENGTH: 22 amino acids
117         (B) TYPE: amino acid
118         (C) STRANDEDNESS: single
119         (D) TOPOLOGY: linear
121     (ii) MOLECULE TYPE: protein
125     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
127     Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Trp Asn Pro Asp
128     1          5          10          15
130     Asp Tyr Gly Gly Val Lys
131     20
133 (2) INFORMATION FOR SEQ ID NO: 5:
135     (i) SEQUENCE CHARACTERISTICS:
136         (A) LENGTH: 12 amino acids
137         (B) TYPE: amino acid
138         (C) STRANDEDNESS: single
139         (D) TOPOLOGY: linear
```

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141 (ii) MOLECULE TYPE: protein
145 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
147 Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu
148 1 5 10
150 (2) INFORMATION FOR SEQ ID NO: 6:
152 (i) SEQUENCE CHARACTERISTICS:
153 (A) LENGTH: 15 amino acids
154 (B) TYPE: amino acid
155 (C) STRANDEDNESS: single
156 (D) TOPOLOGY: linear
158 (ii) MOLECULE TYPE: protein
162 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
164 Tyr Tyr Val Phe Phe Glu Glu Gln Glu Asp Glu Ile Ile Gly Phe
165 1 5 10 15
167 (2) INFORMATION FOR SEQ ID NO: 7:
169 (i) SEQUENCE CHARACTERISTICS:
170 (A) LENGTH: 23 amino acids
171 (B) TYPE: amino acid
172 (C) STRANDEDNESS: single
173 (D) TOPOLOGY: linear
175 (ii) MOLECULE TYPE: protein
179 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
181 Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Tyr Val Phe Phe
182 1 5 10 15
184 Glu Glu Gln Glu Asp Glu Ile
185 20
187 (2) INFORMATION FOR SEQ ID NO: 8:
189 (i) SEQUENCE CHARACTERISTICS:
190 (A) LENGTH: 37 amino acids
191 (B) TYPE: amino acid
192 (C) STRANDEDNESS: single
193 (D) TOPOLOGY: linear
195 (ii) MOLECULE TYPE: protein
199 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
201 Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu His Gln Glu Glu
202 1 5 10 15
204 Asp Phe Arg Val Thr Cys Lys Asp Ile Gln Arg Ile Pro Ser Leu Pro
205 20 25 30
207 Pro Ser Thr Gln Thr
208 35
210 (2) INFORMATION FOR SEQ ID NO: 9:
212 (i) SEQUENCE CHARACTERISTICS:
213 (A) LENGTH: 41 amino acids
214 (B) TYPE: amino acid
215 (C) STRANDEDNESS: single
216 (D) TOPOLOGY: linear
218 (ii) MOLECULE TYPE: protein
222 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
224 Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Leu Arg Gln Arg

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225      1              5              10              15
227      Lys Ser Val Asn Ala Leu Asn Ser Pro Leu His Gln Glu Tyr Glu Glu
228              20              25              30
230      Asn Leu Gly Asp Ser Ile Val Gly Tyr
231              35              40
233 (2) INFORMATION FOR SEQ ID NO: 10:
235      (i) SEQUENCE CHARACTERISTICS:
236          (A) LENGTH: 27 amino acids
237          (B) TYPE: amino acid
238          (C) STRANDEDNESS: single
239          (D) TOPOLOGY: linear
241      (ii) MOLECULE TYPE: protein
243      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
244      Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Tyr Tyr Val Phe
245              1              5              10              15
246      Phe Glu Glu Gln Glu Asp Glu Ile Ile Gly Phe
247              20              25
251 (2) INFORMATION FOR SEQ ID NO: 11:
253      (i) SEQUENCE CHARACTERISTICS:
254          (A) LENGTH: 22 amino acids
255          (B) TYPE: amino acid
256          (C) STRANDEDNESS: single
257          (D) TOPOLOGY: linear
259      (ii) MOLECULE TYPE: protein
261      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
262      Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Tyr Lys Glu Leu
263              1              5              10              15
264      Pro Leu Leu Lys Phe Leu
265              20
271 (2) INFORMATION FOR SEQ ID NO: 12:
273      (i) SEQUENCE CHARACTERISTICS:
274          (A) LENGTH: 31 amino acids
275          (B) TYPE: amino acid
276          (C) STRANDEDNESS: single
277          (D) TOPOLOGY: linear
279      (ii) MOLECULE TYPE: protein
281      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
282      Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Gly Ser Leu Pro Gln Lys
283              1              5              10              15
284      Ser Gln Arg Ser Gln Asp Glu Asn Pro Val Val His Phe
285              20              25              30
291 (2) INFORMATION FOR SEQ ID NO: 13:
293      (i) SEQUENCE CHARACTERISTICS:
294          (A) LENGTH: 32 amino acids
295          (B) TYPE: amino acid
296          (C) STRANDEDNESS: single
297          (D) TOPOLOGY: linear
299      (ii) MOLECULE TYPE: protein
301      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
305

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Input Set : N:\Crf3\RULE60\09956940.raw
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307 Ala Val Gly Ile Gly Ala Leu Phe Leu Gly Phe Leu Pro Thr Ala Arg
308 1 5 10 15
310 Ser Val Gly Ala Ala Asp Gly Ser Ser Trp Glu Gly Val Gly Val Val
311 20 25 30
314 (2) INFORMATION FOR SEQ ID NO: 14:
316 (i) SEQUENCE CHARACTERISTICS:
317 (A) LENGTH: 24 amino acids
318 (B) TYPE: amino acid
319 (C) STRANDEDNESS: single
320 (D) TOPOLOGY: linear
322 (ii) MOLECULE TYPE: protein
327 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
329 Ala Val Gly Ile Gly Ala Leu Phe Leu Leu Asp His Ile Leu Glu Pro
330 1 5 10 15
332 Ser Ile Pro Trp Lys Ser Lys Lys
333 20
335 (2) INFORMATION FOR SEQ ID NO: 15:
337 (i) SEQUENCE CHARACTERISTICS:
338 (A) LENGTH: 13 amino acids
339 (B) TYPE: amino acid
340 (C) STRANDEDNESS: single
341 (D) TOPOLOGY: linear
343 (ii) MOLECULE TYPE: protein
347 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
349 Thr Arg Lys Ser Ile Arg Ile Gln Arg Gly Pro Gly Arg
350 1 5 10
352 (2) INFORMATION FOR SEQ ID NO: 16:
354 (i) SEQUENCE CHARACTERISTICS:
355 (A) LENGTH: 35 amino acids
356 (B) TYPE: amino acid
357 (C) STRANDEDNESS: single
358 (D) TOPOLOGY: linear
360 (ii) MOLECULE TYPE: protein
364 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
366 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
367 1 5 10 15
369 Cys Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro
370 20 25 30
372 Gly Arg Ala
373 35
375 (2) INFORMATION FOR SEQ ID NO: 17:
377 (i) SEQUENCE CHARACTERISTICS:
378 (A) LENGTH: 40 amino acids
379 (B) TYPE: amino acid
380 (C) STRANDEDNESS: single
381 (D) TOPOLOGY: linear
383 (ii) MOLECULE TYPE: protein
391 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
393 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala

3/19/02

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/956,940

DATE: 03/19/2002
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Input Set : N:\Crf3\RULE60\09956940.raw
Output Set: N:\CRF3\03192002\I956940.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:42; Xaa Pos.5,8.

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 76
Seq#:2; Line(s) 93
Seq#:3; Line(s) 113
Seq#:4; Line(s) 133
Seq#:5; Line(s) 150
Seq#:6; Line(s) 167
Seq#:7; Line(s) 187
Seq#:8; Line(s) 210
Seq#:9; Line(s) 233
Seq#:10; Line(s) 253
Seq#:11; Line(s) 273
Seq#:12; Line(s) 293
Seq#:13; Line(s) 314
Seq#:14; Line(s) 335
Seq#:15; Line(s) 352
Seq#:16; Line(s) 375
Seq#:17; Line(s) 402
Seq#:18; Line(s) 425
Seq#:19; Line(s) 451
Seq#:20; Line(s) 474
Seq#:21; Line(s) 494
Seq#:22; Line(s) 519
Seq#:23; Line(s) 545
Seq#:24; Line(s) 568
Seq#:25; Line(s) 594
Seq#:26; Line(s) 611
Seq#:27; Line(s) 628
Seq#:28; Line(s) 647
Seq#:29; Line(s) 664
Seq#:30; Line(s) 681
Seq#:31; Line(s) 698
Seq#:32; Line(s) 716
Seq#:33; Line(s) 733
Seq#:34; Line(s) 750
Seq#:35; Line(s) 767
Seq#:36; Line(s) 784
Seq#:37; Line(s) 804
Seq#:38; Line(s) 824

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/956,940

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Input Set : N:\Crf3\RULE60\09956940.raw

Output Set: N:\CRF3\03192002\I956940.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:892 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0



Creation date: 09-15-2003
Indexing Officer: DTINSLEY - DIANE TINSLEY
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Legal Date: 12-03-2002

		Number of pages
No.	Doccode	5
1	CTRS	

Total number of pages: 5

Remarks:

Order of re-scan issued on